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(54) Title: DEPLETION OF ENDOGENOUS PRIMORDIAL GERM CELLS IN AVIAN SPECIES

(57) Abstract: Methods for modulating primordial germ cell (PGC) numbers and/or development in avians are provided. In one embodiment, the presently disclosed subject matter provides a method for modulating primordial germ cells numbers in an avian embryo comprising immunizing a female bird with an antigen associated with primordial germ cells, whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies specific for the antigen to modulate numbers of endogenous PGCs in an avian embryo present within the egg. Also provided are methods for producing chimeric avians, methods for increasing the proportion of male birds in a plurality of eggs, methods of producing avian gametes, and methods for enhancing germ line transmission of nucleic acids in birds.

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